

EXHIBIT 2

**UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

Kate, et al.

Plaintiffs,

VS.

de Blasio, et al.

Defendants.

DECLARATION OF DR. MARTIN MAKARY

Civil Action No. 1:21-cv-07863

STATE OF)
COUNTY OF) ss.:
)

Martin Makary, M.D., M.P.H. declares under penalty of perjury, pursuant to 28 U.S.C. § 1746, that the following is true:

1. I was asked to provide a declaration providing my opinion, as an expert witness, on points related to a direct threat analysis in this case.
2. Some of my background and qualifications are below.
3. I have a master's in public health from the Harvard School of Public Health and am a licensed physician.
4. I am a Professor at the Johns Hopkins University School of Medicine where I have been teaching and conducting research for nineteen years.
5. In addition, I manage patients where issues of infection control are paramount, particularly among immunosuppressed patients after surgery.
6. I have published over 250 scientific articles and served in leadership in the World Health Organization Safe Surgery Saves Lives initiative.

7. I have not and will not receive any financial or other compensation for writing this Declaration. Nor have I received compensation for preparing declarations or reports or for testifying in *any* other case related to the Covid-19 pandemic. I have no financial or other ties to the Plaintiffs or the attorneys in this suit. My participation has been motivated solely by my commitment to public health.
8. Those who choose not to get vaccinated may be making a poor health decision at their own individual risk. However, they are unlikely to pose a significant public health threat to those around them in a school setting.
9. The risk of harm to an immune person is minimal. Vaccination has been shown to be highly effective in preventing severe Covid disease and in downgrading the severity of illness.
10. Similarly, the risk to children is very low. Most children experience very mild symptoms or no symptoms. For example, the incidence of hospitalization from COVID-19 in kids ages 5 to 17 was 0.3 per million for the week ending July 24, 2021, according to the Centers for Disease Control and Prevention¹.
11. The infection fatality rate of Covid illness in Covid immune people is lower than the infection fatality rate of influenza in people who have not received the influenza vaccine.
12. Requiring the vaccine in people who are already immune with natural immunity is excessive because natural immunity is at least as effective as vaccinated immunity in several studies. In the largest study conducted worldwide, natural

¹ https://gis.cdc.gov/grasp/COVIDNet/COVID19_3.html

immunity was approximately 27-times more effective than vaccinated immunity in preventing symptomatic Covid infection.²

13. This affirmed a June Cleveland Clinic study of health-care workers (who are often exposed to the virus), in which none who had previously tested positive for the Covid got reinfected.³ The study authors concluded that “individuals who have had SARS-CoV-2 infection are unlikely to benefit from covid-19 vaccination.”
14. Similarly in May, a Washington University study reported that even a mild covid infection resulted in long-lasting immunity.⁴
15. The emerging data from these and multiple other studies suggest that natural immunity is as effective or better than vaccine-induced immunity in terms of clinical outcomes in the time studied.
16. Some public health officials cite a CDC study suggesting that vaccinated immunity is more effective than natural immunity, but the study is limited because it only examined a 2-month period in one state and did not report whether people who developed covid had any symptoms. This was the only slice of data reported by the CDC to my knowledge, despite the CDC having data on many states for a much longer period of time.

² Sivan Gazit, Roei Shlezinger, Galit Perez, Roni Lotan, Asaf Peretz, Amir BenTov, Dani Cohen, Khitam Muhsen, Gabriel Chodick, Tal Patalon. Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections. medRxiv August 24, 2021; DOI: [10.1101/2021.08.24.21262415](https://doi.org/10.1101/2021.08.24.21262415)

³ Nabin K. Shrestha, Patrick C. Burke, Amy S. Nowacki, Paul Terpeluk, Steven M. Gordon. Necessity of COVID-19 vaccination in previously infected individuals. medRxiv. June 1, 2021. DOI: [10.1101/2021.06.01.21258176](https://doi.org/10.1101/2021.06.01.21258176)

⁴ Turner JS, Kim W, Kalaidina E, Goss CW, Rauseo AM, Schmitz AJ, Hansen L, Haile A, Klebert MK, Pusic I, O'Halloran JA, Presti RM, Ellebedy AH. SARS-CoV-2 infection induces long-lived bone marrow plasma cells in humans. Nature. May 24, 2021. DOI: [10.1038/s41586-021-03647-4](https://doi.org/10.1038/s41586-021-03647-4)

17. There is high population immunity in many parts of the U.S. This stems from a combination of natural immunity⁵ and vaccinated immunity.
18. Roughly a third to half of Americans who are unvaccinated have natural immunity, based on an analysis of California residents⁶, and the estimate may be higher in people who worked throughout the pandemic. The prevalence of natural immunity increases with each passing day.
19. Medical exemptions to vaccine mandates should not be pre-defined to be overly narrow. There are multiple valid reasons why a clinician may not recommend a full 2-dose vaccine regimen to an individual, depending on their clinical situation and history.
20. Mandating vaccines for "every living, walking American" is, as of now, not well-supported by science. Moreover, an indiscriminate vaccination policy may result in unintended harm.
21. Clinical studies show, for example, that boys and men under the age of twenty three face a risk of myocarditis after the second vaccine dose that may be as high as 1 per 7000 males. Myocarditis may lead to death. The true incidence of this known vaccine-related complications is not fully understood with reliable population studies.
22. For any male employees under the age of 23, an exemption to avoid the second vaccine dose can be supported by the science.

⁵ <https://www.wsj.com/articles/the-power-of-natural-immunity-11623171303>

⁶ <https://www.sfchronicle.com/health/article/More-than-a-third-of-Californians-recently-tested-16015721.php>

23. Currently, we do not have robust and highly-reliable system for actively tracking adverse reactions to the vaccine in young people. As a result, the CDC may not be accurately capturing the extent of rare adverse reactions in this population.

A handwritten signature in black ink, reading "Martin Makary", written over a horizontal line.

DR. MARTIN MAKARY

M.D., M.P.H.